

03040202-04

(*Sparrow Swamp*)

General Description

Watershed 03040202-04 (formerly 03040202-100 and 03040202-110) is located in Darlington, Florence, and Lee Counties and consists primarily of *Sparrow Swamp* and its tributaries. The watershed occupies 142,565 acres of the Upper and Lower Coastal Plain regions of South Carolina. Land use/land cover in the watershed includes: 53.1% agricultural land, 26.4% forested wetland, 12.1% forested land, 6.4% urban land, 1.6% scrub/shrub land, 0.2% water, and 0.2% nonforested wetland.

Sparrow Swamp originates near the City of Hartsville, and accepts drainage from Burnt Branch before flowing through Smith Pond and Marco Millpond. Gully Run flows through Bell Pond and joins Sparrow Swamp in Marco Millpond. Long Branch enters the swamp downstream, followed by Harris Branch and Screeches Branch. Boggy Gully Swamp (The Bay, Big Cypress Bay, Little Cypress Bay, Boggy Gully Bay, Bees Wax Bay) also originates near Hartsville, and flows through Harolds Millpond and Andrews Millpond before draining into Sparrow Swamp. Sparrow Swamp then accepts drainage from McCalls Branch, Newman Swamp, Boyds Pond, Long Branch, Deep Hole Swamp (Camel Branch, Bay Branch, Bay Lake, Poplar Branch), and Magnolia Branch. Lake Swamp (Dargans Bay, Jacks Branch, Horse Branch) enters the system next followed by Long Branch (Meadow Prong) at the base of the watershed. The Sparrow Swamp Watershed flows into the Lynches River. Sparrow Swamp, Newman Swamp, and Lake Swamp are classified FW* (Dissolved oxygen not less than 4 mg/l and pH between 5.0 and 8.5) and the remaining streams in the watershed are classified FW. There are a total of 346.6 stream miles and 227.1 acres of lake waters in this watershed, all classified FW.

Surface Water Quality

<u>Station #</u>	<u>Type</u>	<u>Class</u>	<u>Description</u>
PD-229	S/W	FW*	NEWMAN SWAMP AT S-16-449 0.9 MI NE OF LAMAR
PD-072	S/W	FW*	SPARROW SWAMP AT S-16-697 2.5 MI E OF LAMAR
PD-345	W/INT	FW*	LAKE SWAMP AT S-21-38
PD-332	P/INT	FW*	SPARROW SWAMP AT S-21-55 NEAR JOHNSONS CROSSROADS

Newman Swamp (PD-229) – This is a blackwater system, characterized by naturally low dissolved oxygen concentration conditions. Although dissolved oxygen excursions occurred, they were typical of values seen in blackwater systems and were considered natural, not standards violations. Aquatic life uses are fully supported, and a significant decreasing trend in five-day biochemical oxygen demand suggests improving conditions for this parameter. Recreational uses are partially supported due to fecal coliform bacteria excursions; however, a significant decreasing trend in fecal coliform bacteria concentration suggests improving conditions for this parameter.

Sparrow Swamp – There are two SCDHEC monitoring sites along Sparrow Swamp. This is a blackwater system, characterized by naturally low dissolved oxygen concentration conditions. At

the upstream site (**PD-072**), aquatic life uses are fully supported. A significant increasing trend in dissolved oxygen concentration and decreasing trends in five-day biochemical oxygen demand and total phosphorus concentration suggest improving conditions for these parameters. Although dissolved oxygen excursions occurred, they were typical of values seen in blackwater systems and were considered natural, not standards violations. Recreational uses are partially supported at this site due to fecal coliform bacteria excursions. At the downstream site (**PD-332**), aquatic life and recreational uses are fully supported. Significant decreasing trends in five-day biochemical oxygen demand and total nitrogen concentration suggest improving conditions for these parameters.

Lake Swamp (PD-345) – Aquatic life and recreational uses are fully supported, and a significant decreasing trend in five-day biochemical oxygen demand suggests improving conditions for this parameter.

Groundwater Quality

<u>Well #</u>	<u>Class</u>	<u>Aquifer</u>	<u>Location</u>
AMB-033	GB	MIDDENDORF	HARTSVILLE #4
AMB-034	GB	MIDDENDORF	TIMMONSVILLE #2

NPDES Program

Active NPDES Facilities

<i>RECEIVING STREAM FACILITY NAME PERMITTED FLOW @ PIPE (MGD)</i>	<i>NPDES# TYPE COMMENT</i>
SPARROW SWAMP TOWN OF TIMMONSVILLE WWTP PIPE #: 001 FLOW: 1.29 (HCR)	SC0025356 MAJOR DOMESTIC
LAKE SWAMP MCCUTCHEON CONSTR./MCCUTCHEON #3 PIPE #: 001 FLOW: M/R	SCG730545 MINOR INDUSTRIAL
LAKE SWAMP WILLIS CONSTRUCTION/HUGGINS PIT PIPE #: 001 FLOW: M/R	SCG730709 MINOR INDUSTRIAL
MAGNOLIA BRANCH T & E CONSTRUCTION, LLC/RUTLAND MINE PIPE #: 001 FLOW: M/R	SCG731006 MINOR INDUSTRIAL

Nonpoint Source Management Program

Land Disposal Activities

Landfill Facilities

<i>LANDFILL NAME FACILITY TYPE</i>	<i>PERMIT # STATUS</i>
LEE COUNTY COMPOSTING FACILITY COMPOSTING	312640-3001 ACTIVE
LEE COUNTY C&D LANDFILL C&D	312640-2001 ACTIVE

Mining Activities

***MINING COMPANY
MINE NAME***

***PERMIT #
MINERAL***

RE GOODSON CONSTRUCTION CO., INC.
RE GOODSON MINE

1200-41
SAND; SAND/CLAY

WILLIS CONSTRUCTION COMPANY
HUGGINS PIT

1577-41
SAND

MCCUTCHEON CONSTRUCTION CO., INC.
MCCUTCHEON MINE #3

1515-41
SAND

Growth Potential

There is a moderate potential for growth in this watershed, which contains the Towns of Lydia and Lamar, and a portion of the Town of Timmons ville. U.S. Hwy. 76 and a rail line cross the watershed at Timmons ville connecting the Cities of Sumter and Florence, and U.S. Hwy. 401 crosses the watershed at the Town of Lamar. Water and sewer services are provided for Timmons ville and Lamar and the immediate surrounding area. Improved water and sewer systems in these areas hold the potential for future industrial growth in the area. Interstates I-20 and I-95 cross the watershed, and an expansion of the Timmons ville Water and Sewer System along S.C. 403 to I-95 will encourage growth. The expansion of the Honda plant at the I-95/CR21-83 should spur future growth. There are plans to widen U.S. Hwy. 76 east of Timmons ville to I-95, which would bring about commercial growth.

Lynches Rivers and Sparrow Swamp Watersheds (03040202-04, -05)

